

Listing of Claims:

1. (currently amended) Fastening device comprising a male part (1, 5, 7,9) and a female part (2, 6, 8) adapted to be selectively inserted into bores (30, 40) passing through a stack of at least two panels (3, 4) , wherein the female part (2, 6, 8) is an elastic clip comprising a cap (20, 60, 80) from which extends a hollow foot (21, 61, 81) having different minimum (Dmin) and maximum (Dmax) internal transverse dimensions, wherein the male part (1, 5, 7, 9) comprises a head (11, 51, 71, 91) extended by a barrel (10, 50, 70, 90) having at least a first given intermediate transverse dimension (DI), between the minimum (Dmin) and maximum (Dmax) internal transverse dimensions, the barrel being sized to be inserted into the hollow foot (21, 61, 81) through an opening (24, 64, 84) in the cap, with the hollow foot (21, 61, 81) and the barrel having an unlocked configuration with respect to each other as a function of at least one relative axial position of the barrel (10, 50, 70, 90) and the hollow foot (21, 61, 81), and for at least a first relative rotational position of the barrel and the foot, with the foot (21, 61, 81) having a reduced transverse dimension in the unlocked configuration, and the hollow foot and barrel having a locked configuration with respect to each other in which the foot (21, 61, 81) is subjected by the barrel (10, 50, 70, 90) to a radial elastic expansion, wherein the cap (20, 60, 80) is formed by a spring blade bent back on itself and comprising at least one inner branch (201, 601, 801) joined to the hollow foot (21, 61, 81) and one outer branch (202, 602, 802) having a medium portion into which the opening (24, 64, 84) of the cap is pierced, and in that the inner and outer branches (201, 202; 601, 602; 801, 802) are apart from one another at least for the unlocked

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configuration of the hollow foot (21, 61, 81) and are shaped so as to allow an elastic deformation of at least said medium portion of the outer branch (202, 602, 802) when the foot (21, 61, 81) moves from its unlocked configuration to its locked configuration, wherein said head of the male part directly contacts said medium portion of said cap when the foot moves to its locked configuration, so that said medium portion [being] is elastically depressed under the effect of said head of said male part when said foot is in its locked configuration.

2. (original) Fastening device according to claim 1, characterized in that the hollow foot (21, 61, 81) comprises a plurality of prongs (23, 25; 63, 65; 83, 85) having respective attached ends (63b, 65b; 83b, 85b) by which these prongs are joined to the cap (20, 60, 80), and respective radially converging free ends (63a, 65a; 83a, 85a), which between them define the minimum internal transverse dimension (D_{min}) of the foot (21, 61, 81).

3. (previously presented) Fastening device according to claim 1, characterized in that the male (1, 5, 7, 9) and female (2, 6, 8) parts comprise at least first (100; 52, 53; 72, 73; 92, 93) and second (23a, 25a; 63a, 65a; 83a, 85a) respective surface features disposed facing one another for an extreme relative axial position of the male and female parts, selectively obtained by completely inserting the barrel (10, 50, 70, 90) into the foot (21, 61, 81), the first and second surface features mutually cooperating to maintain the male (1, 5, 7, 9) and female (2, 6, 8) parts in the extreme relative axial position.

4. (previously presented) Fastening device according to claim 3, characterized in that the first surface feature is formed by a radial protuberance of the barrel.

5. (cancelled)

6. (previously presented) Fastening device according to claim 3, characterized in that the second surface feature is formed by the free ends of the prongs (23a, 25a; 63a, 65a; 83a, 85a).

7. (previously presented) Fastening device according to claim 2, characterized in that the hollow foot (61, 81) comprises two prongs (63, 65; 83, 85) separated from one another by an open space (E) for the unlocked configuration of the foot, and in that the barrel (50, 70, 90) has at least a second transverse dimension (D2), that selectively enters the open space, the result of which is that the hollow foot (61; 81) selectively adopts its unlocked configuration for a second relative rotational position of the barrel (50, 70, 90) and the foot (61, 81), independently from the relative axial position of the male and female parts.

8. (original) Fastening device according to claim 7, characterized in that the male (7) and female (6) parts comprise at least third (714, 715) and fourth (614, 615) respective surface features disposed facing one another for the locked configuration of

the foot (61), these third and fourth surface features mutually cooperating to maintain the male (7) and female (6) parts in their first relative rotational position.

9. (previously presented) Fastening device according to claim 1, characterized in that at least one elastic radial tab (26, 28; 86, 88) is provided in the opening (24) of the cap in order to selectively cooperate with the barrel.

10. (previously presented) Fastening device according to claim 1, characterized in that the inner branch (601, 801) of the cap includes at least two internal elastic tabs (6011, 6012; 8011, 8012) capable of applying pressure to the stack of panels in the locked configuration of the foot.

11. (previously presented) Fastening device according to claim 1, characterized in that the clip is produced by cutting, bending and heat treating a metal blank.

12. (previously presented) Fastening device according to claim 1, characterized in that the clip (2, 6, 8) is made of tempered steel.

13. (previously presented) Fastening device according to claim 8, characterized in that the third (714a, 715a; 914a, 915a) and fourth (614a, 615a; 814, 815a) surface features are respectively constituted by an axial rib of the barrel and by a corresponding cutout of the cap.

14. (previously presented) Fastening device according to claim 8, characterized in that the third and fourth surface features are respectively constituted by a recess of the head and by a boss of the cap.

15. (previously presented) Fastening device according to claim 1, characterized in that the barrel (70) has a collar (709) inserted into the opening of the cap counter to an elastic force and rendering the male and female parts inseparable from one another.

16. (previously presented) Fastening device according to claim 1, characterized in that the head (11, 51, 71) presses against the outer branch (202, 602), for the locked configuration of the foot (21, 61), and moves the inner and outer branches 601, 602 toward one another so as to generate an elastic stress between them.

17. (previously presented) Fastening device according to claim 1, characterized in that the head (91) passes through the outer branch (802) and comes to rest against the inner branch (801) of the cap (80) for the locked configuration of the foot (81).

18. (original) Fastening device according to claim 17, characterized in that the male part (9) includes a second head (91a) that remains outside the outer branch (802), even for the locked configuration of the foot (91).

19. (previously presented) Assembly constituted by a fastening device according to claim 1 and by a stack of panels (3, 4) in which bores (30, 40) are provided, and

including a bottom panel (4), in which assembly the thickness of the stack is between 0.5 and 3mm, while the bore in the bottom panel has a larger transverse dimension of 7.7 mm.

20. (previously presented) Assembly constituted by a fastening device according to claim 1 and by a stack of panels (3, 4) in which bores (30, 40) are provided, and including a bottom panel (4), in which assembly the thickness of the stack is between 3 and 4.5 mm, while the bore in the bottom panel (4) has a larger transverse dimension of 8.2 mm.

21. (previously presented) Assembly constituted by a fastening device according to claim 1 and by a stack of panels (3, 4) in which bores (30, 40) are provided and including a bottom panel (4), in which assembly the thickness of the stack is between 4.5 and 6 mm, while the bore in the bottom panel (4) has a larger transverse dimension of 8.7 mm.

22. (previously presented) Assembly constituted by a fastening device according to claim 1 and by a stack of panels (3, 4) in which bores (30, 40) are provided and including a bottom panel (4), in which assembly the thickness of the stack is between 6 and 7 mm, while the bore in the bottom panel (4) has a larger transverse dimension of 9.2 mm.

23. (previously presented) Fastening device comprising a male part (1, 5, 7, 9) and a female part (2, 6, 8) adapted to be inserted into bores (30, 40) passing through a

stack of at least two panels (3, 4) , wherein the female part (2, 6, 8) is an elastic clip comprising a cap (20, 60, 80) from which extends a hollow foot (21, 61, 81) having different minimum (Dmin) and maximum (Dmax) internal transverse dimensions, wherein the male part (1, 5, 7, 9) comprises a head (11, 51, 71, 91) extended by a barrel (10, 50, 70, 90) having at least a first given intermediate transverse dimension (DI), between the minimum (Dmin) and maximum (Dmax) internal transverse dimensions, the barrel being sized to be inserted into the hollow foot (21, 61, 81) through an opening (24, 64, 84) in the cap, with the hollow foot (21, 81) and the barrel having an unlocked configuration with respect to each other as a function of at least one relative axial positioning of the barrel (10, 50, 70) and the hollow foot (21, 71, 81) and for at least a first relative rotational position of the barrel and the foot, with the foot (21, 61, 81) having a reduced transverse dimension in the unlocked configuration, and the hollow foot and barrel having a locked configuration with respect to each other in which the foot (21, 61, 81) is subjected by the barrel (10, 50, 70, 90) to a radial elastic expansion,

wherein the cap (20, 60, 80) is formed by a spring blade bent back on itself and comprising at least one inner branch (201, 601, 810) joined to the hollow foot (21, 61, 81) and one outer branch (202, 602, 802) into which the opening (24, 64, 84) of the cap is pierced, and in that the inner and outer branches (201,202; 601, 602; 810, 802) are apart from one another at least for the unlocked configuration of the hollow foot (21, 61, 81) and are shaped so as to allow an elastic deformation of at least part of the outer branch (202, 602, 802) when the foot (21, 61, 81) moves from its unlocked configuration to its locked configuration;

wherein the male (1, 5, 7, 9) and female (2, 6, 8) parts comprise at least first (100; 52, 53; 72, 73; 92, 93) and second (23a, 25a; 63a, 65a; (33a, 85a) respective surface features disposed facing one another for an extreme relative axial position of the male and female parts which is reached when the barrel (10, 50, 70, 90) is substantially completely inserted into the foot (21, 61, 81), the first and second surface features mutually cooperating to maintain the male (1, 5, 7, 9) and female (2, 6, 8) parts in the extreme relative axial position,

wherein the first surface feature is formed by a radial protuberance of the barrel, and

wherein the first surface feature is a lug (72, 73; 92, 93) disposed facing a corresponding hole (612, 613; 812, 813) in the foot, and the lug passes through the hole when the foot (61, 81) is in both the unlocked configuration and the first rotational position relative to the barrel (70, 90).

24. (currently amended) Fastening device comprising a male part (1, 5, 7, 9) and a female part (2, 6, 8) adapted to be inserted into bores (30, 40) passing through a stack of at least two panels (3, 4), wherein the female part (2, 6, 8) is an elastic clip comprising a cap (20, 60, 80) from which extends a hollow foot (21, 61, 81) having different minimum (Dmin) and maximum (Dmax) internal transverse dimensions, wherein the male part (1, 5, 7, 9) comprises a head (11, 51, 71, 91) extended by a barrel (10, 50, 70, 90) having a non-circular cross section with at least a first given intermediate transverse dimension (D1), between the minimum (Dmin) and maximum (Dmax) internal transverse dimensions, the barrel being sized to be inserted into the

hollow foot (21, 61, 81) through an opening (24, 64, 84) in the cap, with the hollow foot (21, 61, 81) and the barrel having an unlocked configuration with respect to each other as a function of at least one relative axial position of the barrel (10, 50, 70, 90) and the hollow foot (21, 61, 81), and for at least a first relative rotational position of the barrel and the foot, with the foot (21, 61, 81) having a reduced transverse dimension in the unlocked configuration, and the hollow foot and barrel having a locked configuration with respect to each other in which the foot (21, 61, 81) is subjected by the barrel (10, 50, 70, 90) to a radial elastic expansion,

wherein the cap (20, 60, 80) is formed by a spring blade bent back on itself and comprising at least one inner branch (201, 601, 801) joined to the hollow foot (21, 61, 81) and one outer branch (202, 602, 802) into which the opening (24, 64, 84) of the cap is pierced, and wherein the inner and outer branches (201, 202; 601, 602; 801, 802) are apart from one another at least for the unlocked configuration of the hollow foot (21, 61, 81) and are shaped so as to allow an elastic deformation of at least part of the outer branch (202, 602, 802) when the foot (21, 61, 81) moves from its unlocked configuration to its locked configuration,

wherein the hollow foot (21, 61, 81) comprises a plurality of prongs (23, 25; 63, 65; 83, 85) having respective attached ends (63b, 65b; 83b, 85b) by which these prongs are joined to the cap (20, 60, 80), and respective radially converging free ends (63a, 65a; 83a, 85a), which between them define the minimum internal transverse dimension (D_{min}) of the foot (21, 61, 81),

wherein the male (1, 5, 7, 9) and female (2, 6, 8) parts comprise at least first (100; 52, 53; 72, 73; 92, 93) and second (23a, 25a; 63a, 65a; 83a, 85a) respective

surface features disposed facing one another for an extreme relative axial position of the male and female parts which is reached when the barrel (10, 50, 70, 90) is substantially completely inserted into the foot (21, 61, 81), the first and second features mutually cooperating to maintain the male (1, 5, 7, 9) and female (2, 6, 8) parts in the extreme relative axial position,

wherein the first surface feature is formed by radial protuberances of the barrel in the form of lugs (72, 73; 92, 93), and

wherein each lug comprises a shoulder on which a blade is bearing when the male and female parts are in their locked configuration.

25. (previously presented) Fastening device according to claim 4, characterized in that the radial protuberance of the barrel is a screw thread (100; 52, 53).

26. (previously presented) Fastening device according to claim 4, characterized in that the radial protuberance of the barrel is a lug (72, 73; 92, 93).

27. (previously presented) Fastening device comprising a male part (1, 5, 7, 9) and a female part (2, 6, 8) adapted to be selectively inserted into bores (30, 40) passing through a stack of at least two panels (3, 4), wherein the female part (2, 6, 8) is an elastic clip comprising a cap (20, 60, 80) from which extends a hollow foot (21, 61, 81) having different minimum (D_{min}) and maximum (D_{max}) internal transverse dimensions, wherein the male part (1, 5, 7, 9) comprises a head (11, 51, 71, 91) extended by a barrel (10, 50, 70, 90) having at least a first given intermediate transverse dimension

(DI) , between the minimum (Dmin) and maximum (Dmax) internal transverse dimensions, the barrel being sized to be inserted into the hollow foot (21, 61, 81) through an opening (24, 64, 84) in the cap, with the hollow foot (21, 61, 81) and the barrel having an unlocked configuration with respect to each other as a function of at least one relative axial position of the barrel (10, 50, 70, 90) and the hollow foot (21, 61, 81), and for at least a first relative rotational position of the barrel and the foot, with the foot (21, 61, 81) having a reduced transverse dimension in the unlocked configuration, and the hollow foot and barrel having a locked configuration with respect to each other in which the foot (21, 61, 81) is subjected by the barrel (10, 50, 70, 90) to a radial elastic expansion, the fastening device being characterized in that the cap (20, 60, 80) is formed by a spring blade bent back on itself and comprising at least one inner branch (201, 601, 801) joined to the hollow foot (21, 61, 81) and one outer branch (202, 602, 802) into which the opening (24, 64, 84) of the cap is pierced, and in that the inner and outer branches (201, 202; 601, 602; 801, 802) are apart from one another at least for the unlocked configuration of the hollow foot (21, 61, 81) and are shaped so as to allow an elastic deformation of at least part of the outer branch (202, 602, 802) when the foot (21, 61, 81) moves from its unlocked configuration to its locked configuration;

wherein the male (1, 5, 7, 9) and female (2, 6, 8) parts comprise at least first (100; 52, 53; 72, 73; 92, 93) and second (23a, 25a; 63a, 65a; 83a, 85a) respective surface features disposed facing one another for an extreme relative axial position of the male and female parts, selectively obtained by completely inserting the barrel (10, 50, 70, 90) into the foot (21, 61, 81), the first and second surface features mutually

cooperating to maintain the male (1, 5, 7, 9) and female (2, 6, 8) parts in the extreme relative axial position; and

wherein the second surface feature is formed by the free ends of the prongs (23a, 25a; 63a, 65a; 83a, 85a).

28. (previously presented) Fastening device comprising a male part (1, 5, 7,9) and a female part (2, 6, 8) adapted to be selectively inserted into bores (30, 40) passing through a stack of at least two panels (3, 4) , wherein the female part (2, 6, 8) is an elastic clip comprising a cap (20, 60, 80) from which extends a hollow foot (21, 61, 81) having different minimum (Dmin) and maximum (Dmax) internal transverse dimensions, wherein the male part (1, 5, 7, 9) comprises a head (11, 51, 71, 91) extended by a barrel (10, 50, 70, 90) having at least a first given intermediate transverse dimension (DI) , between the minimum (Dmin) and maximum (Dmax) internal transverse dimensions, the barrel being sized to be inserted into the hollow foot (21, 61, 81) through an opening (24, 64, 84) in the cap, with the hollow foot (21, 61, 81) and the barrel having an unlocked configuration with respect to each other as a function of at least one relative axial position of the barrel (10, 50, 70, 90) and the hollow foot (21, 61, 81), and for at least a first relative rotational position of the barrel and the foot, with the foot (21, 61, 81) having a reduced transverse dimension in the unlocked configuration, and the hollow foot and barrel having a locked configuration with respect to each other in which the foot (21, 61, 81) is subjected by the barrel (10, 50, 70, 90) to a radial elastic expansion, the fastening device being characterized in that the cap (20, 60, 80) is formed by a spring blade bent back on itself and comprising at least one inner branch

(201, 601, 801) joined to the hollow foot (21, 61, 81) and one outer branch (202, 602, 802) into which the opening (24, 64, 84) of the cap is pierced, and in that the inner and outer branches (201, 202; 601, 602; 801, 802) are apart from one another at least for the unlocked configuration of the hollow foot (21, 61, 81) and are shaped so as to allow an elastic deformation of at least part of the outer branch (202, 602, 802) when the foot (21, 61, 81) moves from its unlocked configuration to its locked configuration;

wherein the hollow foot (21, 61, 81) comprises a plurality of prongs (23, 25; 63, 65; 83, 85) having respective attached ends (63b, 65b; 83b, 85b) by which these prongs are joined to the cap (20, 60, 80), and respective radially converging free ends (63a, 65a; 83a, 85a), which between them define the minimum internal transverse dimension (Dmin) of the foot (21, 61, 81); and

wherein the hollow foot (61, 81) comprises two prongs (63, 65; 83, 85) separated from one another by an open space (E) for the unlocked configuration of the foot, and in that the barrel (50, 70, 90) has at least a second transverse dimension (D2), that selectively enters the open space, the result of which is that the hollow foot (61; 81) selectively adopts its unlocked configuration for a second relative rotational position of the barrel (50, 70, 90) and the foot (61, 81), independently from the relative axial position of the male and female parts.

29. (previously presented) Fastening device according to claim 28, characterized in that the male (7) and female (6) parts comprise at least third (714, 715) and fourth (614, 615) respective surface features disposed facing one another for the locked configuration of the foot (61), these third and fourth surface features mutually

cooperating to maintain the male (7) and female (6) parts in their first relative rotational position.

30. (previously presented) Fastening device according to claim 29, characterized in that the third (714a, 715a; 914a, 915a) and fourth (614a, 615a; 814, 815a) surface features are respectively constituted by an axial rib of the barrel and by a corresponding cutout of the cap.

31. (previously presented) Fastening device according to claim 29, characterized in that the third and fourth surface features are respectively constituted by a recess of the head and by a boss of the cap.

32. (previously presented) Fastening device comprising a male part (1, 5, 7,9) and a female part (2, 6, 8) adapted to be selectively inserted into bores (30, 40) passing through a stack of at least two panels (3, 4) , wherein the female part (2, 6, 8) is an elastic clip comprising a cap (20, 60, 80) from which extends a hollow foot (21, 61, 81) having different minimum (Dmin) and maximum (Dmax) internal transverse dimensions, wherein the male part (1, 5, 7, 9) comprises a head (11, 51, 71, 91) extended by a barrel (10, 50, 70, 90) having at least a first given intermediate transverse dimension (DI) , between the minimum (Dmin) and maximum (Dmax) internal transverse dimensions, the barrel being sized to be inserted into the hollow foot (21, 61, 81) through an opening (24, 64, 84) in the cap, with the hollow foot (21, 61, 81) and the barrel having an unlocked configuration with respect to each other as a function of at

least one relative axial position of the barrel (10, 50, 70, 90) and the hollow foot (21, 61, 81), and for at least a first relative rotational position of the barrel and the foot, with the foot (21, 61, 81) having a reduced transverse dimension in the unlocked configuration, and the hollow foot and barrel having a locked configuration with respect to each other in which the foot (21, 61, 81) is subjected by the barrel (10, 50, 70, 90) to a radial elastic expansion, the fastening device being characterized in that the cap (20, 60, 80) is formed by a spring blade bent back on itself and comprising at least one inner branch (201, 601, 801) joined to the hollow foot (21, 61, 81) and one outer branch (202, 602, 802) into which the opening (24, 64, 84) of the cap is pierced, and in that the inner and outer branches (201, 202; 601, 602; 801, 802) are apart from one another at least for the unlocked configuration of the hollow foot (21, 61, 81) and are shaped so as to allow an elastic deformation of at least part of the outer branch (202, 602, 802) when the foot (21, 61, 81) moves from its unlocked configuration to its locked configuration; and

wherein the head (91) passes through the outer branch (802) and comes to rest against the inner branch (801) of the cap (80) for the locked configuration of the foot (81).

33. (previously presented) Fastening device according to claim 32, characterized in that the male part (9) includes a second head (91a) that remains outside the outer branch (802), even for the locked configuration of the foot (91).